2/8/2005

l3 and phenylglycidate
172 PHENYLGLYCIDATE
34 PHENYLGLYCIDATES
186 PHENYLGLYCIDATE
(PHENYLGLYCIDATE OR PHENYLGLYCIDATES)
L4 2 L3 AND PHENYLGLYCIDATE

=> d l4 ibib abs hitstr

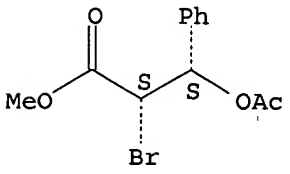
L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:815440 CAPLUS
DOCUMENT NUMBER: 142:23146
TITLE: Chemoenzymatic approach to optically active **phenylglycidates**: resolution of bromo- and iodohydrins
AUTHOR(S): Anand, Naveen; Kapoor, Munish; Koul, Surrinder; Taneja, Subhash C.; Sharma, Rattan L.; Qazi, Ghulam N.
CORPORATE SOURCE: Biotechnology Division, Regional Research Laboratory, Jammu Tawi, 180 001, India
SOURCE: Tetrahedron: Asymmetry (2004), 15(19), 3131-3138
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Enantiomerically enriched **phenylglycidates**, precursors of the taxol C-13 phenylisoserine side chain and diltiazem, were prepared by kinetic resolution of anti-2-bromo-3-hydroxy- and anti-3-hydroxy-2-iodophenylpropanoates to provide enantioenriched (2R,3R)- and (2S,3S)-halohydrins. The bulkiness and inflexibility of bromo and iodo groups in halohydrins have made them inaccessible to the active site of most of the lipases utilized for the hydrolysis of their acyloxy derivs. In a set of 22 hydrolases screened, including native as well as com. enzymes, only Aspergillus niger (Lipase AS, AMANO) could catalyze the hydrolysis with high enantioselectivity (E = 176). The resolved halohydrins easily underwent transformation to (2S,3R)- and (2R,3S)-**phenylglycidates**.

IT **145987-12-8P 757232-70-5P 757232-72-7P**
757232-74-9P 800368-87-0P 800368-88-1P
800368-89-2P 800368-90-5P
RL: PUR (Purification or recovery); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(chemoenzymic approach to optically active **phenylglycidates** via resolution of bromo- and iodohydrins)

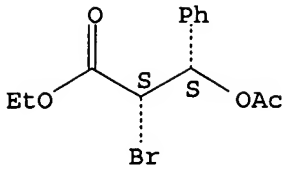
RN 145987-12-8 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



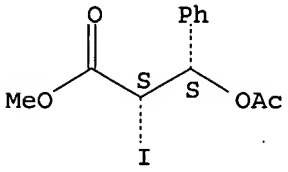
RN 757232-70-5 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



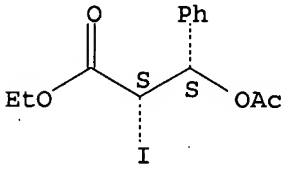
RN 757232-72-7 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



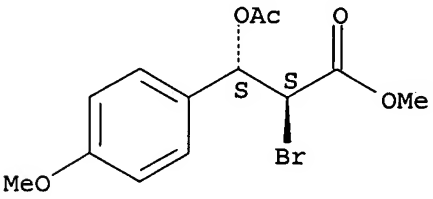
RN 757232-74-9 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



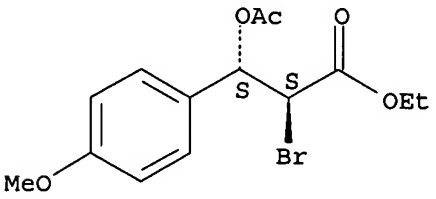
RN 800368-87-0 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-4-methoxy-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



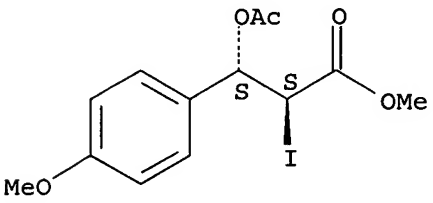
RN 800368-88-1 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-4-methoxy-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



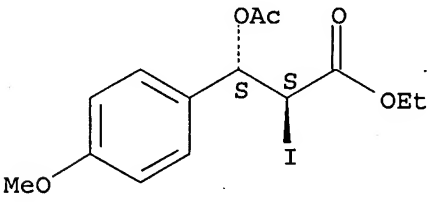
RN 800368-89-2 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-4-methoxy-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 800368-90-5 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-4-methoxy-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

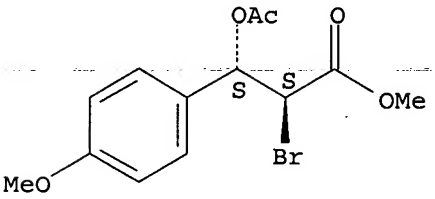
Absolute stereochemistry. Rotation (+).



IT **59339-53-6P 59339-56-9P 66168-33-0P**
800368-79-0P 800368-80-3P 800368-81-4P
800368-82-5P 800368-83-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(chemoenzymic approach to optically active **phenylglycidates** via resolution of bromo- and iodohydrins)

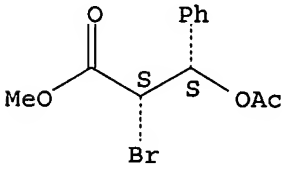
RN 59339-53-6 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-4-methoxy-, methyl ester, (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



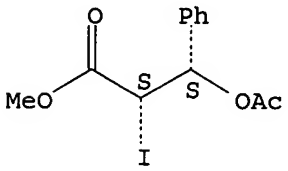
RN 59339-56-9 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, methyl ester, (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



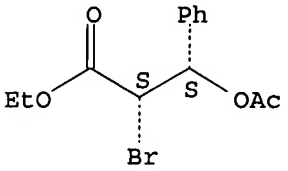
RN 66168-33-0 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, methyl ester, (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



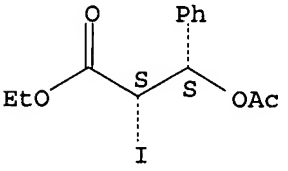
RN 800368-79-0 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, ethyl ester, (αR,βR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



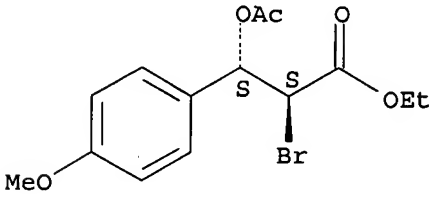
RN 800368-80-3 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, ethyl ester, (αR,βR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



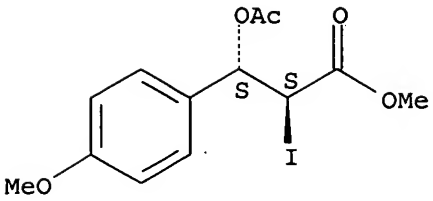
RN 800368-81-4 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-4-methoxy-, ethyl ester, (αR,βR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



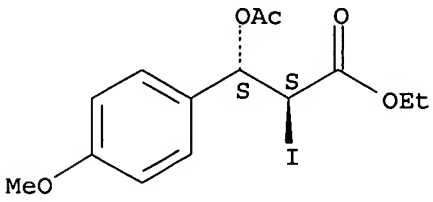
RN 800368-82-5 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-4-methoxy-, methyl ester, (αR,βR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 800368-83-6 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-4-methoxy-, ethyl ester, (αR,βR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:780853 CAPLUS
DOCUMENT NUMBER: 141:276373
TITLE: Stereoselective chemoenzymatic process for preparing optically enriched **phenylglycidates**
INVENTOR(S): Anand, Naveen; Kapoor, Munish; Taneja, Subhash Chandra; Koul, Surrinder; Sharma, Ratan Lal; Qazi, Gulam Nabi
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004081219	A1	20040923	WO 2004-IB670	20040310
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004259943	A1	20041223	US 2004-798199	20040310

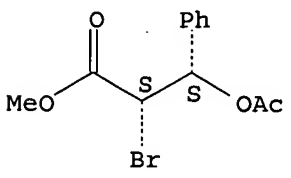
PRIORITY APPLN. INFO.: IN 2003-DE275 A 20030312
OTHER SOURCE(S): CASREACT 141:276373; MARPAT 141:276373

AB The present invention relates to a novel and efficient chemoenzymic process of preparation of optically active trans alkyl **phenylglycidates**. The invention particularly discloses a novel process for the chemoenzymic synthesis of two enantiomers of trans alkyl **phenylglycidate** i.e. alkyl(2S,3R)-**phenylglycidate** and alkyl(2R,3S)-**phenylglycidate**.

IT **145987-12-8P 757232-70-5P 757232-72-7P 757232-74-9P**
RL: BCP (Biochemical process); BYP (Byproduct); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); PROC (Process)
(stereoselective chemoenzymic process for preparing optically enriched **phenylglycidates**)

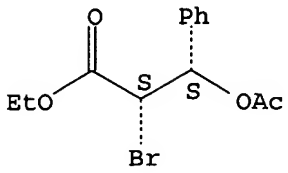
RN 145987-12-8 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



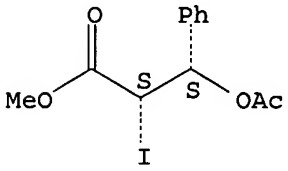
RN 757232-70-5 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



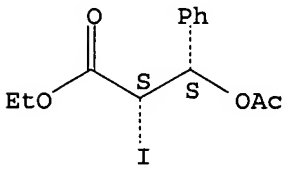
RN 757232-72-7 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, methyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

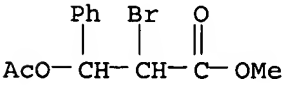


RN 757232-74-9 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, ethyl ester, (αS,βS)- (9CI) (CA INDEX NAME)

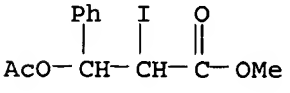
Absolute stereochemistry. Rotation (+).



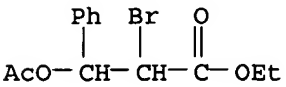
IT **52742-04-8P 61682-25-5P 62317-42-4P 757232-68-1P**
RL: BCP (Biochemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(stereoselective chemoenzymic process for preparing optically enriched **phenylglycidates**)
RN 52742-04-8 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, methyl ester (9CI) (CA INDEX NAME)



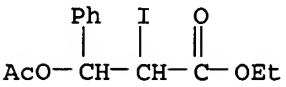
RN 61682-25-5 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, methyl ester (9CI) (CA INDEX NAME)



RN 62317-42-4 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-bromo-, ethyl ester (9CI) (CA INDEX NAME)



RN 757232-68-1 CAPLUS
CN Benzenepropanoic acid, β-(acetyloxy)-α-iodo-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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